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"Skittles & Red Bull is my favourite flavour": E-cigarettes, smoking, vaping and the changing landscape of nicotine consumption amongst British teenagers –implications for the normalisation debate

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Abstract (200 words)

Aims: From an academic discourse explaining trends in drug-related attitudes and behaviours, 'normalisation' now also encompasses public health policy advocating 'denormalisation' of smoking. This study explored young people's attitudes and behaviours to cigarettes and e-cigarettes to ascertain whether a process of 'renormalisation' was underway.

Methods: A six-month multi-method study was conducted in NW England. Data collection in April-July 2014 included a convenience sample survey of 233 students; secondary analysis of a 3,500 respondent survey; stakeholder interviews; participant observation sessions; focus groups; and participatory research events with over 100 students.

Findings: Young people used e-cigarettes primarily for flavour combinations and to perform 'tricks'; with the public performance of 'vaping' valued as an indicator of experienced use. Smoking cessation and nicotine consumption were less important motivations. When comparing e-cigarettes with eight indicators of normalisation – additionally, legal status and risk perception – there were indications of a growing cultural accommodation of 'vaping'.

Conclusion: The changing landscape of nicotine and non nicotine products challenges traditional conceptualisations of 'smoking' and 'non-smoking' and problematises the notion of linear processes of normalisation in respect not just of young people's tobacco and nicotine use, but more generally, of delivery systems and the drugs dispensed within them, suggesting marketplace-differentiated normalisation.

"Skittles & Red Bull is my favourite flavour": E-cigarettes, smoking, vaping and the changing landscape of nicotine consumption amongst British teenagers –implications for the normalisation debate

Introduction

In their monograph on the normalisation of drug use amongst British adolescents, Parker, Aldridge and Measham (1998) argued that recreational use of illegal drugs such as cannabis and ecstasy was increasingly culturally accommodated by users and non users in 1990s Britain, with tobacco included in this cluster of normalised consumption. Since then, legislation around the world banning smoking in enclosed public places has built on a sustained fall in cigarette use across recent decades due to a growing evidence base on the harms to smokers, and subsequently non smokers. These changes have led to an increased stigmatisation of smokers and for some UK public health professionals, an assumed process of 'denormalisation' of smoking.

Alongside an assumed denormalisation of smoking, more recently there has been a diversification of the tobacco, smoking and nicotine marketplace with the emergence of electronic cigarettes (e-cigarettes) and vaporising systems, as well as the growth in shisha use and dedicated shisha cafés. Therefore we currently face a situation where, whilst tobacco use and cigarette smoking are reducing, a growing market of different and more complex delivery systems are becoming popular with some young people, potentially challenging our commonly-held assumptions about smoking, tobacco and nicotine use.

This paper draws on a six month multi-method action research project conducted in north west England during 2014 that explored trends in smoking-related attitudes and behaviours by young people aged 14-25. For the purposes of this paper, we focus on our findings in relation to e-cigarette use and the contextualisation of e-cigarettes in academic and policy debates about normalisation, denormalisation and renormalisation. Recognising normalisation as a socially and culturally infused concept that cannot be reduced to a single metric, this study considered the six key indicators of normalisation outlined in the original thesis along with two additional indicators suggested here – legal status and risk perception –to explore the extent to which there might be a growing cultural accommodation or acceptance of 'vaping', and (as has been argued by some health professionals) whether a process of renormalisation could be under way in relation to smoking more broadly. The wider implications of these developments are considered in relation to the conceptualisation of the normalisation thesis and routes of ingestion, as well as the framing of contemporary policy debates.

Background: The diversification of the tobacco, smoking and nicotine market place

In the last decade there has been a significant diversification of the tobacco, smoking and nicotine marketplace. The emergence of e-cigarettes and vaporisers, that deliver nicotine and nicotine free flavoured product through a vaporising delivery system, has had a significant effect on 'smoking' in the UK. Since 2012, use of e-cigarettes by adult smokers and ex-smokers has steadily increased (West et al, 2016). Action for Smoking on Health (ASH 2015a) estimates that there are now 2.6 million e-cigarette users in Britain.

A wide range of concerns have emerged with this diversification of the tobacco market and

development of electronic nicotine delivery system (ENDS) products. These include their appeal to young people; the risk of increased nicotine dependence; their potential to act as a 'stepping stone' or 'gateway' to traditional cigarettes and other substances;¹ their use in enclosed public places; the possible risks to bystanders from second hand inhalation; and the lack of manufacturing and retail regulation. For UK public health policy makers, professionals and the press this debate has polarised around the relative merits of e-cigarettes as a low harm means to smoking reduction or cessation (Cahill et al, 2013; McNeill A et al, 2015; Nutt et al, 2014; PHE, 2015; RCP, 2007), contrasted with the potential risks associated with their use, as a gateway to tobacco and through the 'renormalisation' of smoking more generally (BBC News, 2014; Davies, 2014; Farsalinos and Polosa, 2014).

The public health debate surrounding e-cigarettes and the development of the ENDS market has occurred against a backdrop of conventional cigarette smoking amongst young people falling to its lowest level in decades (Fuller and Hawkins, 2014). Smoke free legislation has been followed by a public health policy of responsabilisation and stigmatisation of smoking with the intention to 'denormalise' it (Bell et al, 2010a; WHO, 2008), in order to make smoking 'abnormal' and to make individual choices that have resultant personal and social costs "undesirably different" (Goffman, 1963: 15). Critics have noted, however, that this 'shaming' approach could increase stigmatisation of lower income smokers and exacerbate existing health inequalities (eg. Bayer, 2008; Bell et al, 2010a, 2010b). Therefore we face a situation in the UK where, whilst tobacco use and cigarette smoking continue to fall, a growing market of different and more complex 'delivery systems' and 'vape' products such as e-cigarettes and e-shisha are becoming increasingly popular with some young people.

Regulations come into force at European and UK level in May 2016 designed to limit sales and marketing and to categorise some e-cigarettes as medicinal products (see MHRA, 2013; European Commission, 2014). Internationally, approaches to e-cigarettes vary, with some European countries classing them as medicines and others including them in tobacco legislation banning promotion and sale to minors. Over 40 countries have extended their tobacco ban in enclosed public places and workplaces to e-cigarettes, as have some US cities (e.g. New York and Chicago), a move recommended by the World Health Organisation (2014: 11) "until exhaled vapour is proven to be not harmful to bystanders and reasonable evidence exists that smoke-free policy enforcement is not undermined". In the absence of federal regulations in the US, 44 states have adopted their own e-cigarette regulations. A handful of countries (eg. Brazil, Uruguay) have banned the sale and use of e-cigarettes outright. In the UK, although not covered by existing tobacco legislation, e-cigarette use is banned in many football stadia and public transport networks, both in transit and at stations (Willis, 2015). The Scottish government plans to ban e-cigarettes in hospitals and the Welsh government plans to ban them in all enclosed public places through their Public Health Bill which comes into force in 2017 (BBC News, 2015).

The scale of development of the UK ENDS market is evident in the increasing number of specialist e-cigarette providers both online and in mainstream shopping outlets in towns and cities across the country, as well as their sale by non specialist retailers. Overall the e-cigarette industry has been estimated to be worth £90 million pounds sterling in the UK and £1.8 billion worldwide

¹ The gateway hypothesis, strongly disputed within the field of drug studies, suggests that the use of 'soft' drugs such as cannabis can lead to the use of 'hard' drugs such as heroin and cocaine. This progression draws on pharmacological explanations (changes in brain functioning); market explanations (access and opportunity); and social/psychological 'inadequacies' (such as low self esteem), (see Coomber et al, 2013, for summary and Blackman, 2004, for critique).

(Storr, 2014). E-liquids, the main contents of most vaporising e-cigarette devices, are available in a wide range of flavours, odours and nicotine strengths, usually ranging from 36mg/ml (3.6%) at the upper end down to nicotine-free liquids. E-cigarettes can be bought in a huge array of colours, flavours and designs to appeal to different consumers, ranging from low cost disposable products sold in discount shops and market stalls, through to sophisticated vaporising systems costing in excess of £100 pounds sterling that can be customised in terms of style and delivery modes (such as variable voltage or wattage), and through personal 'hacks' or 'mods' (that can alter resistance and change the vapour cloud). Products are also available that have Bluetooth capability, with the ability to provide usage statistics (such as nicotine use, vapour emitted, cigarette equivalence), link to mobile phones to make calls or listen to music, and adjust the power output of the device via mobile phone apps. Other products offer variants such as vapour-free systems, e-shisha (or shisha 'pens') and e-cigars (Bauld et al, 2014). Vaporisers also hold the potential to deliver other liquid and dry products including tobacco, cannabis, synthetic cannabinoids, e-shisha, herbal products and liquid THC, with the first synthetic cannabinoid products for use in e-cigarettes coming to the UK market in the summer of 2014; the first legal cannabis vaporisers sold in the UK in August 2015 (Wilson, 2015); and cannabis 'e-spliffs' sold in US states where there is a legal cannabis market. As 'vaping' has increased, a number of specialist 'vape' bars have sprung up in UK city centres catering to this new market.²

Normalisation, cigarettes and smoking: unpacking the concept

In the original normalisation thesis by Parker, Aldridge and Measham (1998) it was argued that adolescent recreational use of illegal drugs such as cannabis and ecstasy was increasingly prevalent in 1990s Britain, alongside a growing cultural acceptance by both users and non users. Key indicators of normalisation included four quantitative measures relating to individual drug-related behaviour (offers, experimentation, regular use and intended future use) and two qualitative measures attempting to gauge wider socio-cultural attitudes to usage (familiarity and cultural accommodation).

Cigarette smoking was somewhat neglected in the original normalisation thesis, perhaps indicative of a stagnant phase in smoking research more generally in the 1990s. The harms of tobacco cigarettes had been well established since Doll's report in the 1950s (Doll and Hill, 1950; 1954) and public health was increasingly successful at promulgating the links between tobacco and cancer in subsequent decades, for both smokers and bystanders. However, the perceived cultural tolerance of recreational drug use was assumed by Parker and colleagues to (still) also include cigarette smoking in 1990s Britain – despite falling prevalence – with smoking seen as one of a cluster of behaviours associated with certain groups of "risk takers" (Plant and Plant, 1992). Therefore, although data on cigarette usage was collected for the North West England Longitudinal Study, it was somewhat casually included as peripheral to the main focus on alcohol and illicit drugs, cited as an example of how low prevalence could co-exist with widespread cultural tolerance:

"Although tobacco use is *clearly* normalised and most young people have tried a cigarette only a minority are regular smokers and even then their behaviour is only acceptable to their peers in certain settings." (Parker et al, 1998: 153) [our emphasis]

By contrast, Sznitman et al (2015) focused on prevalence, just one of the quantitative measures of normalisation, by empirically testing whether changes in population level smoking prevalence

² For example, the *Avant Garde Bespoke Vaping Bar*, billed as "the UK's first high-end vaping bar", opened in London's West End in February 2015 (Bentley, 2015).

were significantly related to changes in adolescent smoking, in a quantitative analysis of five waves of a nationally representative survey of Israeli Jewish youth. The researchers, having previously calculated that population prevalence rates above 40% could be interpreted as evidence for normalisation (Sznitman et al, 2013), concluded that adolescent smoking was associated with cumulative multiple risk factors rather than population level prevalence. They did find, however, that smoking became more common in low risk youth when population prevalence increased although not in high risk youth. This is somewhat different to the original conceptualisation of normalisation, however, which advocated that prevalence was just one of six measures of normalisation and was an indicator of such processes at work rather than an explanation for them, with tolerance by non smokers of greater significance than population level prevalence. In fact, Parker directly addresses this by arguing that:

“Normalisation does not require ‘everyone’ to be taking drugs, as with tobacco we do not have a situation where most citizens are regular smokers but we have, for many decades, had coexistence and accommodation of smokers by non smokers.” (2001:9)

This tolerance by non smokers towards smokers changed within a few short years, however, with a global ban on smoking in enclosed public places that further accelerated the falling prevalence and growing cultural stigma associated with smoking, suggesting a significant role for the wider legislative and cultural context in influencing attitudes towards consumption, moving beyond raw prevalence levels. Furthermore, these smoking-related developments led to an interesting shift in discourses of normalisation and denormalisation, from having been an *academic* concept used to explore and explain changing drug-related attitudes and behaviours initially in 1990s Britain and then further afield, evolving into an explicit, stated *policy* aim within public health tobacco strategy by the late 2000s (Bell et al, 2000; Lavack, 1999). This has led to the current situation where cigarette smoking is at its lowest level in decades in the UK (Fuller and Hawkins, 2014), supported by smoke free legislation and a policy advocating an explicit, intentional and self evident (yet neither defined nor explained) ‘denormalisation’ of smoking. Consequently a key concern of public health professionals in relation to the emergence, increased availability and use of e-cigarettes has been that it could jeopardise this denormalisation policy and reverse the public health gains of recent years.

The assumption that smoking, tobacco and nicotine use has been undergoing a process of denormalisation amongst young people in the UK has been bolstered by longitudinal survey data that reveal a significant reduction in the prevalence of cigarette use.³ Increased regulation around the labelling, promotion and sale of tobacco products to young people, taxation, the smoking ban, illicit tobacco enforcement, and supportive interventions from Stop Smoking Services have played central roles in the UK Government's Tobacco Control Plan (Department of Health, 2011), with a stated intention of reducing smoking prevalence amongst young people in England to 12% or less by 2015. Nevertheless, whilst smoking prevalence amongst young people and adults has declined, Hopkinson et al (2014) estimate that around 207,000 young people aged 11-15 start smoking in the UK every year, and Fuller and Hawkins (2014) estimated that around 100,000 pupils within this age range were regular smokers in 2013.

West, Brown and Beard's (2016) Smoking Toolkit Study (STS) suggested that e-cigarette use increased from 2% of smokers and ex-smokers in 2011 to around 23% in 2015, with 13% smoking daily. Whilst lifetime prevalence had stabilised since the end of 2013, daily e-cigarette use was still

³ Amongst secondary school children rates of having tried a cigarette have fallen from 42% to 22% in 2003-2013 with rates of cigarette trying now at their lowest levels since the survey began in 1982 (Fuller and Hawkins, 2014).

increasing. By the first quarter of 2015 it was estimated that 5.5% of the adult population of England used e-cigarettes (McNeill et al, 2015). A survey by ASH/ YouGov (2014) found that 51% of current smokers had tried e-cigarettes (rising from 8% in 2010), with 18% of current smokers regularly using e-cigarettes. Whilst both the STS and ASH survey showed a steady increase in e-cigarette use from 2011 to 2013, recent STS data shows that overall nicotine use (via cigarette, nicotine replacement therapy or e-cigarette) has declined.

Amongst young people, the 2015 Smokefree GB Youth Survey (ASH, 2015b) reported that 13% of 11-18 year-olds had tried e-cigarettes at least once (22% among 16-18 year olds), compared to 7% in 2014 (ASH / YouGov, 2014). Despite an increase in both awareness and trying of e-cigarettes, the survey found that regular use by young people was relatively rare and was confined largely to cigarette smokers. In fact in the 2014 survey, virtually all teenagers (99%) who had never smoked cigarettes had also never tried e-cigarettes. This reflects trends across similar studies in other parts of the UK (ASH Scotland, 2014; ASH, 2015b; Public Health England, 2015) and indeed in the US (CDC, 2013; Dutra and Glantz, 2014). A separate national study of English 15 year olds in 2014 found that whilst 18% had tried e-cigarettes at least once only 3% currently used them (Ipsos MORI, 2015). Whilst there were no gender differences in reported e-cigarette use by 15 year olds, white respondents were more likely to have tried e-cigarettes than other ethnic groups, as were those living in more deprived areas. The highest levels of lifetime prevalence of e-cigarette use were in north west England, in Blackpool (34%), Blackburn with Darwen (32%) and Tameside (32%).

Therefore the emergence of e-cigarettes in the marketplace has been both welcomed and a cause for concern. Fears of unregulated production and sales, young people being introduced to cigarettes through nicotine based e-cigarettes, increased nicotine dependence and a renormalisation of smoking have led to opposition to e-cigarette use amongst some academics, policymakers and health professionals (Aktan et al, 2014; Boseley, 2014; WHO, 2014). Others, however, argue that e-cigarettes, or more accurately vaporising products, have the potential to play a central role in supporting people to stop or to reduce cigarette smoking (Callaghan-Lyon, 2014; Hajek et al, 2014; Britton and Bogdanovica, 2014; McNeill et al, 2015).

In August 2015, amidst controversy within the public health field and confusion amongst the wider UK population about e-cigarette safety and relative risks, Public Health England clarified its position in relation to e-cigarettes, emphasising their potential as a lower risk (relative to cigarettes) means of smoking cessation (Public Health England, 2015). A review of evidence (McNeill et al, 2015) highlighted a growing public perception of e-cigarettes as being equally as harmful as cigarettes – despite estimates that e-cigarettes are 95% safer than cigarettes (Nutt et al, 2014); 60% more effective than over-the-counter nicotine replacement therapy for smoking cessation (Brown et al, 2014); and more than twice as effective as nicotine-free e-cigarettes (McRobbie et al, 2014) – thereby discouraging smokers from switching (McNeill et al, 2015: 12; PHE, 2015). The current position therefore asserts e-cigarettes’ “potential to make a significant contribution to the endgame for tobacco” (PHE, 2015: 5), providing that regulatory frameworks are effectively enacted and that uptake is monitored, particularly in relation to young people and smokers. McNeill et al (2015: 38) also recommended abandoning the use of gateway terminology until there was greater clarity about how the theory could be tested in the field.

A Mixed Method Study

This paper is based on the fifth phase of a rolling programme of short action research projects on drug trends in Lancashire, a large county in the north west of England, funded by the local health authority to inform service provision.⁴ Bearing in mind the changing nature of tobacco markets discussed above, the primary research question for this study was: what are the likely implications of an increasingly diverse smoking, tobacco and nicotine marketplace for the next generation of potential smokers reaching adulthood? The aim of the research was to gather data about young people's tobacco and nicotine use and to explore young people's perceptions of the risks associated with different types of nicotine products.

A mixed methods research strategy was employed in order to capture the full range of qualitative and quantitative indicators of normalisation, with survey data examining levels of use, trying and intention, and a series of group and individual fieldwork encounters (interviews, focus groups and ethnographic observation) exploring the socio-cultural meanings that young people attach to e-cigarette use, their associated risks and the wider cultural context to ENDS. Fieldwork was conducted between April and July 2014. Quantitative data collection and analysis included a self report convenience sample survey completed by 233 students at two further education colleges⁵ in Blackburn and Preston (Lancashire, North West England) and secondary analysis of over 3,500 respondents in the Trading Standards North West Young Person's Alcohol and Tobacco Survey (TSNW) (Collins et al, 2013), with all survey data analysed using SPSS. Qualitative data collection included 12 semi structured stakeholder interviews, three community focus groups, and two participatory research events (involving 109 young people in a range of research activities at the same two further education colleges as the survey) with all qualitative data analysed thematically.

Survey participants were asked questions about their use of a wide range of nicotine delivery systems (cigarettes, e-cigarettes / vapourisers, shisha, paan) and substance use that may involve tobacco (for example, smoking cannabis). Questions about alcohol use and the smoking of new psychoactive substances (NPS) were also included. Mindful of methodological challenges in operationalising 'regular use' amongst young people (particularly where notions of regularity might vary by substance), usage was examined in relation to those who had never used substances, those who had tried them (and liked or disliked them upon trying), and those who had used the substance in the previous day, week, month or year. The survey also asked about self identified smoking status (such as whether respondents considered themselves current or ex e-cigarette 'users') and motivations for use, including the role of smoking cessation.

The survey highlighted a number of significant methodological challenges in the increasingly diverse tobacco and nicotine marketplace. Firstly, differences between surveys regarding 'trying' and 'accessing' substances made comparisons between survey data more challenging than

⁴ With thanks to Chris Lee of Lancashire County Council for his ongoing support for the emerging drug trends research programme, and to Jo McCullough and Lee Harrington from Lancashire County Council and Donald Read from Blackburn with Darwen Council, for their support during the research process. This is the fifth report in the Emerging Drug Trends (EDT) Programme funded by Public Health Lancashire (formerly Lancashire Drug and Alcohol Action Team (LDAAT)) and, for Phase Five, Blackburn with Darwen Public Health. The EDT programme is an ongoing series of short action research projects informing local health service provision directed by Professor Fiona Measham. To date five research projects have explored changing trends in legal and illicit drug use and their policy implications across Lancashire through a series of studies in different leisure contexts and with different communities and social groups. Phase Five was undertaken by Professor Fiona Measham, Dr. Kate O'Brien and Gavin Turnbull at Durham University (Measham et al, 2014). For previous reports see:

<http://www3.lancashire.gov.uk/corporate/web/?siteid=6119&pageid=35445&e=e>

⁵ UK 'further education' colleges teach a wide variety of academic and occupational subjects targeted predominantly at the 16-18 age group, after secondary school and before 'higher education' at university.

anticipated. Secondly, asking young people about self identification as a 'user' could be more difficult than for adults because they are earlier in their 'using' careers and do not necessarily relate to such terminology. Thirdly, the term 'smoker' was particularly problematic, given that it was often assumed by respondents to refer specifically to traditional cigarettes and not to other smoked substances (such as shisha, for example). Relatedly, some respondents described 'smoking' e-cigarettes, whilst many others referred to 'vaping' instead.⁶ Fourthly, attempting to measure quantities of ENDS products consumed proved to be challenging when the traditional cigarette as a unit of measurement was irrelevant, resulting in the necessity to ask detailed questions about puffs, sharing and inhalation techniques. Clarity of concepts is important not only to ensure consistency between measurements and to maximise the potential for comparison, but so that low level use of emerging drugs or delivery systems is not missed.

The participatory research events were held at the same two colleges of further education as the surveys and involved 109 young people. These events were based on voluntary participation and took place in communal college spaces during lunchtime. They were organised around the use of visual research tools adapted from participatory action research (Kindon et al 2007). Participatory approaches in social research view individuals as having valuable knowledge about their lives and experiences and advocate that research design should suit the research questions being asked and the participants involved. For this reason, we designed a series of visual research tools using flip chart paper, 'post-it' notes and self-adhesive paper circles as ways of making the research process engaging, interactive and accessible to young people (Heath et al, 2009). The tools focused on young people's perceptions of the positive and negative characteristics of different smoking and vaporising products and their understandings of smoking-related harms. We also compared the responses of young people who identified as current cigarette smokers with those who did not.

The focus of these events was on enabling young people to discuss their perceptions and use of nicotine and non nicotine products and delivery systems 'in their own words' and to explain how they weighed up the associated risks. Participants were invited to contribute as much or as little as they liked and to review, engage with and verify the contributions of their peers. These conversations were recorded by the researcher who was guiding the respondents.

Results

(i) Traditional cigarettes

In the TSNW survey 16% of respondents in Lancashire and 15% in Blackburn with Darwen could be considered regular smokers (if respondents 'only smoking when drinking alcohol' are also included in analyses). The survey of students at two further education colleges produced a sample of 233 respondents,⁷ 22% of whom identified as daily cigarette smokers, with daily smoking ranging from 1 to 30 cigarettes, with a mean of 10 cigarettes smoked per day (sd=5). A further 10% were non daily smokers, 12% considered themselves to be ex-smokers and 57% reporting never having

⁶ Oxford Dictionaries chose "vape" as their word of 2014 (Storr, 2014).

⁷ The survey of students at two further education colleges produced a sample with an average age of 18 years old, 58% female, 46% living in Blackburn with Darwen, 31% in Preston and 21% in other areas of Lancashire. 213 indicated their self defined ethnicity: 58% identified as white, 25% Asian (the majority from Blackburn with Darwen), 9% Black and 5% mixed race.

smoked.⁸ The survey found an association between all of the different smoking groups. For example, 26% of self defined daily smokers also defined themselves as current e-cigarette users. This rate is higher than the survey conducted by ASH in England (see Public Health England, 2015), which found that 19.1% of current smokers used e-cigarettes monthly or more often, with a Scottish study reporting that 15% of regular smokers were regular e-cigarette users (ASH Scotland, 2014). The higher rate is likely to be due to differences in survey age range, with the further education college survey in this study focussed on predominantly 16-18 year olds rather than 11-18s (ASH, 2015b) or 13-18s (ASH Scotland, 2014). There were no significant gender or ethnicity differences in reported smoking patterns in relation to traditional cigarettes.

(ii) E-cigarettes

In the TSNW Blackburn and Lancashire sample, 26% reported that they had 'accessed' (bought or tried) e-cigarettes, 31% of male respondents and 22% of female respondents. In the TSNW survey 58% of e-cigarette smokers were male. Of the 3,568 respondents who had completed both e-cigarette and smoking questions, 85% of regular smokers had 'accessed' (bought or tried) e-cigarettes compared with 4% of young people who had never smoked who had 'accessed' (tried or bought) e-cigarettes. 42% of those in the 'never smoked' category who had 'accessed' (tried or bought) e-cigarettes had tried shisha. Cross-tabulation of respondents' cigarette smoking with e-cigarette and shisha 'access' highlighted that whilst the vast majority were smokers, both e-cigarettes and shisha were accessed by a small percentage of young people who had never tried cigarettes. However, despite reporting having smoked a tobacco or nicotine product in the form of e-cigarettes or shisha, respondents were classed as having 'never smoked' in the survey since they had never tried traditional cigarettes, showing the complexities of attempting to compare research findings in this area. If those that reported having smoked shisha are omitted from the 'never smoked' count of those who have accessed e-cigarettes, the proportion of 'never smokers' who had accessed e-cigarettes would nearly half, from 15% to 8% (2% of the overall survey population). The proportion of e-cigarette users amongst 'never smokers' (those who have tried neither traditional cigarettes nor shisha) would be just 4%.

The further education college survey found that over half (56%) of young people had tried e-cigarettes (see Table 1). There was a significant relationship between self reported use of traditional cigarettes and e-cigarettes: 45% of self defined current daily cigarette smokers had used e-cigarettes in the last month and 12% on the fieldwork day. By contrast only 9% of self-defined 'never smokers' had used e-cigarettes in the last month and 2% on the fieldwork day. Young men were more likely to have tried e-cigarettes than young women, with nearly two thirds of male respondents (62%) having ever tried e-cigarettes compared with half (50%) of female respondents and 28% of male respondents having used e-cigarettes within the last month compared with 18% of female respondents. Whilst there was a relationship between gender and e-cigarette use with male respondents more likely to report having used them than female respondents, there was no significant relationship between e-cigarette use and self defined ethnicity.

[Table 1 about here]

In terms of self defined e-cigarette status in the further education college survey, 16% identified as

⁸ By comparison, similarly 59% of TSNW respondents aged 14-17 reported never having smoked.

current e-cigarette users, 23% as ex-users and 59% as never having used e-cigarettes. Looking at prevalence of use of different smoking substances, one third of respondents had never tried traditional cigarettes, of whom 21% (n=14) had tried e-cigarettes, four respondents within the last week. Another four past week e-cigarette users had tried but didn't like traditional cigarettes – interestingly six of these eight past week e-cigarette users who either had never smoked traditional cigarettes or tried and didn't like them were also past month shisha smokers. Therefore it would be inaccurate to characterise these e-cigarette users as 'non smokers' simply on the basis of their lack of experience with traditional cigarettes, again showing the porous nature of the 'non smoker' category in this study.

Reasons for e-cigarette use

Given that only 28% of survey respondents said that they used e-cigarettes to stop smoking, the researchers explored alternative reasons for use in the various participatory research events, workshops and focus groups. The most striking finding was how smokers and non-smokers spoke enthusiastically and at length about the wide range of e-cigarette flavours on offer and the pleasures of performing 'tricks' with the vapour, sometimes known as 'cloud chasing'. Firstly, regarding flavours, respondents discussed the specific flavour combinations that they enjoyed: there was a notable, distinctly 'youthful' element to some flavourings such as well known brands of confectionery; as well as more adult-oriented flavourings such as well known alcoholic cocktails (such as 'sex on the beach'), branded caffeine drinks and controlled drugs (notably cannabis). Flavour combinations were also very popular with young people: one of the most popular combinations discussed by this cohort was a confectionery and caffeine drink flavour combination known as 'Skittles and Red Bull'. A number of young people told us that they saved their favourite flavour combinations especially for nights out with friends and for some, 'vaped' at weekends as a flavoured alternative to traditional cigarette use.⁹ Many of the young people who participated in this study's research events or focus groups who reported weekly use of e-cigarettes or vape products told us that they usually purchased two or three flavoured e-liquids or vapours at a time, often from local markets or retail outlets offering multi-buy discounts. One young woman, who was using a cherry and melon flavoured e-cigarette during a focus group, explained that she bought her vapour liquids from a local market trader where she could buy three different flavours for £8 pounds sterling.

Secondly, young people talked animatedly about the 'tricks' or various effects they could perform with the vapour emitted from e-cigarettes (generated primarily from propylene glycol), or had observed their peers perform with the dispensing systems. During the participatory research events young people commented positively and at length about the 'smoke rings' and 'hoops' they could perform with the device and for some, the 'vortexes' that could be achieved by "banging the device to make sparkles". Many participants ranked these 'tricks' as one of the main attractions of e-cigarette use, a finding that was particularly significant for the young male respondents in their early to mid teens. Participants discussed how boys in this age group used e-cigarettes as a group-based activity that enhanced peer group status. For some young men, it appears that displaying competence in the public performance of 'vaping' – 'cloud chasing' and performing 'tricks' – was seen as an indicator of experienced use. Furthermore, given that young people are increasingly "living in and through the internet" (Barratt, 2015), it is unsurprising to find that millions of young

⁹ The design of some e-cigarettes specifically to target weekend night time economy customers was noted by Michael Clapper, owner of multi million pound UK ENDS company *Vapestick* (Storr, 2014) and included features such as pastel colours and sparkly tips.

people, especially young men, are using social media platforms such as *youtube*, *vimeo* and *instagram* to share images, video footage and tutorials of ‘vaping’ skills online. Simultaneously, ‘street cool’ icons are packaging and promoting vaporisers as fashionable, desirable and associated with an ‘edgy’ youth market. The *G Pen* for example, a herbal vaporiser branded as a Snoop Dogg (rap singer) product, is a market leader and his ‘how to’ promotional video has had more than 2 million hits.¹⁰ ‘Cloud chasing’ has now developed to the extent that it is considered by some to be a professional sport, with the New York e-cigarette emporium *Vaporium* holding a vaping competition where professional vapers use modified (largely non nicotine) vaporisers rather than e-cigarettes (Mosbergen, 2014).

Our qualitative findings reveal, therefore, that there are important gender and age dimensions associated with the meanings young people attach to e-cigarettes, ‘vaping’ and ‘cloud chasing’. There is also a distinctly social aspect to young people’s use of e-cigarettes with many respondents telling us that ‘vaping’ and e-cigarette use is a group activity; that ‘vaping’ can enhance group status; and that for some young people, especially younger teenagers, it is an activity that is identified as ‘cool’. Furthermore, a significant number of young people commented on the aesthetic appeal of dispensing systems. Some of the young people that we spoke to coveted vaporising devices as commodities in themselves – that “it feels good”, “it looks cool” – and their sleek and colourful design can make them a lifestyle commodity, a consumer object of desire, much like high end smart phones. Consequently, our study identified how e-cigarettes and ‘vape’ pens were not simply marketed at or purchased by adult smokers for the purposes of smoking cessation, but instead were also a lifestyle product aimed at young people and purchased as such. This supports the findings of McQueen et al (2011) and Barbeau et al (2013) on the role of ‘hobby elements’ (flavours and tricks) and personal identity rather than smoking cessation, as motivations for e-cigarette use by young people in their mid to late teens. Similarly, ASH (2015b, 2015b) and PHE (2015) both noted the popularity of flavoured vaping products, with non smokers and young people more likely to prefer fruit flavours. The findings also resonate with the conclusions of Zhu et al (2014) that the e-cigarette market has evolved from early brands highlighting their advantages over conventional cigarettes to more recent brands emphasising e-cigarettes as products in their own right rather than simply lower harm cigarette substitutes, with consumer choice facilitated by multiple flavours and product versatility. The question is, what happens next for those young people who experiment with e-cigarettes in their early to mid teens and what implications will this have for the smoking of tobacco products? Is the appeal of e-cigarettes time-limited and/or product-limited, a trend that is seen as ‘fun’ and ‘fashionable’, particularly by younger teenagers. Or could a nicotine habit develop as a by-product of such novelty consumption that then carries through into adulthood, and with it, changes attitudes to smoking more generally?

(iii) Normalisation and e-cigarettes – summarising the results and their significance to the normalisation debate

Informed by the six dimensions of normalisation outlined by Parker et al (1998), we compared cigarette and e-cigarette data in relation to availability / offer situations; trying and usage rates; future intentions; self-perceived knowledge and cultural accommodation of substance use. Table 2 summarises the available evidence in relation to these six dimensions and the authors add a further two additional indicators of normalisation (that could be seen to be implicit rather than

¹⁰ <https://www.youtube.com/watch?v=1Gi2DFj0cAw>

explicit in previous studies of normalisation): the legal/regulatory context, and perceptions of risk and attitudes towards safe or acceptable use.

[Table 2 about here]

Legality and offer situations: The emergence of e-cigarettes into the marketplace has created challenges for policymakers and enforcement bodies in relation to advertising, sales and regulation, and it is only with the implementation of the EU Tobacco Products Directive 2016 that regulation is catching up with the pace of growth in the ENDS market. That said, even with the introduction of a minimum purchase age of 18, e-cigarettes are available for sale in a diverse range of settings and, in contrast to recent tobacco regulation (and alcohol regulation) are promoted in a wide range of flavours attractive to young people. For example, in the north west of England during the period covered by this study, e-cigarettes were very widely available, very cheaply and in appealing confectionary and fruit flavours, with no minimum purchase age.

Trying, Regular Use and Future Intentions: Whilst awareness of e-cigarettes, trying and regular use are all reportedly increasing, these figures remain significantly lower than those trying or using traditional cigarettes (although these numbers are falling). As previously mentioned, the majority of e-cigarette users are current or former cigarette smokers and overall nicotine use is declining. Whilst there is little data about future intent, the further education college survey found that a higher proportion of those who were non users had tried and like e-cigarettes compared to traditional cigarettes. This suggests that those who have tried e-cigarettes find them more palatable than cigarettes and, perhaps, more likely to use them again.

Risk perception and self-perceived knowledge: The normalisation domains of particular interest within this study relate to risk perception, self-perceived knowledge and cultural accommodation, explored in the participatory workshops in the further education colleges. Participants were asked to rate on a scale of 0 (negligible) to 10 (very high) how risky or harmful they thought cigarettes, e-cigarettes, shisha and cannabis were. Participants were also asked to give reasons for their decisions and why their ratings might differ between products or substances. Whilst in some ways this was a crude tool, it elicited useful comparisons between perceived harms (see Charts 1 and 2), and more importantly, provided a springboard to further discussion with the researchers.

[Charts 1 and 2 about here]

Variations between different smoking/ nicotine products were apparent within respondents' ratings. In the case of traditional cigarettes, the majority of young people thought that smoking was very harmful. This was the case amongst both non smokers and, to only a slightly lesser degree, smokers. However, this was not reflected in young people's views and risk perceptions in relation to e-cigarettes. Responses to e-cigarette use were more evenly spread across the range (for both cigarette smokers and non smokers) with the majority of respondents rating e-cigarettes around the mid-point (between 3 and 7 on the scale). The reasons that respondents gave for their mid scores tended to reflect concerns that, whilst many stated that e-cigarettes were "better for you than smoking" and helped smokers to quit, they were "still not good for health", "not medically proven" and lacked "scientific research". Due to several widely reported local incidents of charger failure (leading to e-cigarettes 'exploding' and causing domestic fires) young people also expressed concern regarding the general health and safety of products and manufacturing quality control, as well as the harmful effects of the substances within the vaporiser. Knowledge

and awareness was generally quite high, with participants discussing relative risk positions and uncertainties around evidence (although there were some confused messages relating to the content of e-cigarettes). A precautionary position regarding evidence did not appear to link directly to whether a participant had tried or used e-cigarettes, however. Interestingly, a large number of non cigarette smokers in this sample were also positive about e-cigarette use, both in terms of its potential for smoking reduction or cessation and also the more pleasant smells and flavours produced.

Cultural accommodation: Flavours, smells, tricks and the ability to personalise devices meant that ENDS generally were viewed more positively than traditional cigarettes, although cheaper disposable e-cigarettes were regarded less positively. Despite concerns about device safety, reliability, long term effects and cessation efficacy, a large number of both cigarette smokers and non smokers spoke positively about e-cigarettes. Benefits were described in terms of health (“helps smokers quit”, “better for you than smoking”), economic (“cheaper”, “last longer”), personal (“tastes nice”, “different nicotine levels”) and social (“doesn’t smell”, “you can smoke inside”, “it’s a social thing”). For some young people, particularly younger male respondents, there was a suggestion that tricks and the use of particular brands and flavours contributed to social status: “you upgrade from Mafia to Don, from Churchill to Al Capone, from lil Wayne to tupac”. Other (often older and female) respondents were more dismissive, saying that “young kids think its cool” and there was a suggestion that e-cigarettes were, for some at least, a passing fad, “just a gimmick and novelty”, albeit one with the potential for nicotine dependence. Respondents discussed media images of ‘vaping’, illustrating their exposure to mediated messages that portray ‘vaping’ and ENDS in a positive light, as ‘cool’, fashionable and edgy, within just months of them becoming commercially available and being advertised.¹¹ E-cigarette use and vaping, therefore, can be seen as forms of consumption, potentially indeed forms of intoxication, that are increasingly being presented as fashionable and credible within popular culture in and of themselves, albeit as adult-aspirational products with a particular appeal for younger, male teenagers.

It is evident that the young people in this study held quite different view about the various tobacco and nicotine products available to them and relatedly, their perceived risks (and benefits). Risk perceptions and risk-related decisions by young people in relation to tobacco, e-cigarettes and shisha varied depending on the basis of perceived advantages and disadvantages of delivery systems (flavours, tricks, nicotine levels, smells) and were influenced by social, cultural, gendered and, at times, religious factors. Most public health approaches have traditionally focussed on techno-scientific perspectives on risk, whereby risk communication processes are intended to bridge the gap between ‘objective’ risk ‘truths’ and individuals’ (biased) perceptions of hazard and risk. By contrast, risk decision-making for young people in relation to smoking and ‘vaping’ is perhaps better understood through socio-cultural and relational approaches to risk (Tulloch and Lupton, 2003; Lupton, 2006; Lash, 2000; Boholm and Corvellec, 2010), whereby risks are mediated or constructed in a social and cultural context. ENDS (whether traditional cigarettes, e-cigarettes or other devices) are constructed and reconstructed as risk objects in relation to the user and to dynamic social, cultural and religious factors, with decisions balancing a range of considerations such as social acceptability and inclusion. Whilst the young people in this study were clearly not ignorant of scientific and mainstream media presentations of e-cigarettes – indeed many respondents discussed in detail the current debates and recent incidents that they had read about in the press – this study found that their decision-making revolved around complex personal,

¹¹ For example, HBO True Detective series 2 and advertising campaign for *ElevenParis* clothing brand (autumn 2014).

social and cultural factors.

Thoughts on the wider normalisation debate

The original normalisation thesis (Parker et al, 1998) provided a very brief consideration of tobacco's place within a cluster of normalised behaviours, with public health policy more recently aiming explicitly to denormalise smoking based on falling prevalence, increased regulation and an associated reduction in cultural acceptability. The advent of a new delivery system (vaporisers) and new nicotine products have led health professionals to question this view and lead us to ask several questions about normalisation pertinent to both research and policy. Might the advent of e-cigarettes stall this assumed and intentional public health policy of denormalisation of traditional cigarettes and lead to a renormalisation of smoking as a delivery system? Might nicotine, now increasingly commercially distinct from its more harmful cousin tobacco, become a legal stimulant of choice and even normalised in and of itself? And how might the emergence of 'vaping' as an increasingly popular delivery system affect use and associated cultural acceptability of other psychoactive drugs that can be vaporised, particularly given that it is unclear to a casual observer which drug is being consumed? Or might we see further differentiation in the normalisation or denormalisation of young people's 'smoking' practices, behaviours and attitudes, given the likely further differentiation in the market in delivery systems and associated products?

This paper contributes to the broader normalisation debate in three ways. For the first time, routes of ingestion and delivery systems are included in the normalisation debate, which has hitherto focused on types of drugs, drug users and patterns of use. The double binary example of 'tobacco/smoking' and 'nicotine/vaping' provides an opportunity to tease out the intersections between varying routes of ingestion and different psychoactive drugs. 'Vaping' of nicotine (and increasingly other drugs too) challenges the existing evidence base on harms and the assumption of e-cigarettes' lineage to cigarettes, with the result that both health professionals' and users' cost-benefit assessments have been thrown up in the air. As the opportunity to vaporise a growing range of psychoactive drugs opens up, it may lead to attitudinal and behavioural change (key indicators of normalisation) that were not anticipated.

Whether or not the appeal of e-cigarettes transfers to cigarettes and e-cigarette users develop a nicotine/tobacco dependency as a direct consequence of this, this study cannot answer. This study was not designed to address the gateway hypothesis and therefore does not comment on whether the emergence and increase in e-cigarette vaping (or indeed other forms of 'smoking' that are increasing in the UK such as shisha) will, in and of itself, lead to a broader renormalisation of smoking. Substantial longitudinal studies will be required to interrogate the gateway hypothesis and it may be several years before enough evidence is generated. What this study has identified, however, is that the assumed conflation between cigarettes and e-cigarettes by public health professionals is not shared by all young people. The appeal of e-cigarettes for the young people in this study related to flavours and flavour combinations, vaping tricks, 'cool' vaporising systems and the novelty element – but notably not to the effects of nicotine nor as a smoking cessation tool – all factors that distinguish e-cigarettes from traditional cigarettes. With increased regulation of e-cigarettes, marketing of nicotine products as smoking cessation medical aids and a minimum purchase age of 18 for nicotine products it could be that the current distinctions between flavoured non nicotine and nicotine products actually widen and eclipse concerns about gateway effect. Therefore, given that e-cigarettes are establishing themselves in some youth and young adult markets independently of traditional cigarettes, there may be normalisation processes

taking place in relation to specific products, delivery systems and social or cultural groups, supporting a notion of *marketplace-differentiated normalisation*. Variations in labelling, social acceptability and (for example in relation to forthcoming EU legislation) regulation across different tobacco/smoking products add to this differentiated picture, in terms of the regulatory environment as well as the market place.

Secondly, more broadly, by comparing different routes of ingestion with different drugs in the normalisation debate, it problematises our previously linear models of understanding of normalisation and raises the question of how we might identify or assess a socio-cultural trend such as normalisation when there are multiple cross cutting drugs, routes of ingestion and patterns of usage, particularly if anonymised by an homogenous vapour. To what extent does cultural acceptability or condemnation hinge on being able to see or smell consumption in public places? Thus the challenge of attempting to assess normalisation has itself multiplied along with the ENDS market.

Thirdly, the concept of normalisation has moved out of the academic realm and entered policy and public spheres of discourse for the first time, with the denormalisation of smoking becoming a professed public health aim, at least amongst UK professionals, and widely reported in the press. This was something first noted by Blackman (2004) in relation to the potential negative policy consequences of a political application of normalisation that is at odds with the intentions of its original authors. The extent to which such increasingly varied academic and policy understandings of normalisation can co-exist or meaningfully interact, however, remains to be seen, particularly given the increasingly creative evolution of the term in academic as well as policy circles (evidenced elsewhere in this special issue).

Policy Implications

Given the initial regulatory vacuum for e-cigarettes, the European Tobacco Products Directive introduced in May 2016 is welcomed. However, given the appeal of such products to the young people in this study, questions remain regarding flavoured non-nicotine vaping products and how they should be regulated, given their potential use as either prevention/harm reduction products moving away from, or potentially also as ‘stepping stones’ into, nicotine products. Further concerns relate to the flavourings themselves, both in terms of the youth-oriented appeal of confectionary flavourings and the adult-oriented appeal of alcoholic cocktails and controlled drugs. The fact that the impending European regulations do not cover flavoured nicotine and non-nicotine vaping products, and there appears to be little intention by the UK to implement further member-state regulation, further illustrates the gulf between their appeal to young people and public health policy makers’ assumptions that e-cigarettes’ appeals relate primarily to nicotine consumption and cigarette substitution.

The young people in this study were risk aware but not risk averse, suggesting that public health messaging must to be accurate and evidence-based if it is to gain credibility with e-cigarette users, particularly in relation to the different consumption patterns relating to puff, inhalation and toxins for ENDS. Despite e-cigarettes exemplifying “the complex status of nicotine as both a poison and remedy in contemporary public health and tobacco control” (Bell and Keane, 2012: 242), our study found that neither nicotine consumption nor smoking cessation were primary reasons for young people’s use and therefore much of the contemporary adult policy debate lacked resonance with the realities of their experiences and motivations. Rather than seasoned cigarette smokers, our

teenage respondents saw e-cigarettes as a 'new' product with new pleasures, particularly relating to the flavours and 'tricks'. Thus health promotion and smoking cessation services will need a significant overhaul to accommodate the rapidly changing and increasingly complex 'smoking' market, based on a sound understanding not just of the scientific evidence base but also of young people's own experiences; the appeal of products to different socio-demographic groups and the complexities of product and substance displacement. Moreover the increased diversification of products and separation of substances and delivery systems necessitates a more complex risk communication role for public health services, particularly given the growing opportunities for harm reduction, embedded in increasingly sophisticated decision-making around substance and dosage. This potentially exacerbates existing tensions between public health, smoking cessation and harm reduction lobbies.

Since tobacco, nicotine, 'tar', carbon monoxide and other toxins are no longer solely bound together in a single cigarette product, there is a greater need to ensure coherent evidence and information about the effects of individual substances in order for effective decision making regarding harms and interventions to be made at national, local and individual user levels. Put simply, the context forces us to reconsider what we mean by 'smoking' and what public health, research and social implications stem from this.

Conclusions

This paper draws on a 6-month multi-method action research project conducted in north west England during 2014 that explored trends in smoking-related attitudes and behaviours by young people aged 14-25 to gain an understanding of how young people are engaging with emerging (and to a lesser extent existing) tobacco, nicotine and other products and to explore the likely implications of an increasingly diverse smoking marketplace for the next generation of potential smokers. This paper focuses on our findings in relation to e-cigarettes and 'vaping'. We found that smoking cessation was not the main reason for e-cigarette use by the majority of young people in this study but rather, e-cigarettes were seen as a 'new' pleasure, particularly in relation to their (youth-oriented and adult-oriented) flavours. A second appeal of e-cigarettes, particularly for younger male respondents in their mid teens, was the 'tricks' performed using the device, sometimes known as 'cloud chasing'. There were indicators of a growing acceptance or 'cultural accommodation' of e-cigarette use by some young people, although not necessarily an associated renormalisation of traditional tobacco cigarettes, given that the two attractions discussed above related specifically to the qualities of vaping e-cigarettes as distinct from smoking traditional cigarettes. This is contrasted with the possibly transient appeal of e-cigarettes as a fun or fashionable 'toy', particularly for this cohort of teenage boys, alluded to in negative terms by older and female respondents.

The diversification of the ENDS market and growing range of devices capable of delivering tobacco, nicotine or other smoked products, is creating new and different challenges for public health, for enforcement and for research measuring changing patterns and prevalence of tobacco and nicotine use. Young people themselves are taking on board this increased market differentiation and separation of drugs and delivery systems. With much previous research framed through the lens of the traditional cigarette smoker, this study suggests that the notion of 'smoker' and 'non-smoker' may need to be revisited within the context of this increasingly diverse market, increasingly complex smoking 'careers' and the question of whether some young people (if small numbers) may come to smoking through products other than traditional tobacco

cigarettes. The centrality of cigarette smoking, and the traditional cigarette as a measurable unit of tobacco or nicotine use, adds a further challenge to future research on smoking particularly in relation to consumption measurements given the diversity of delivery systems and their contents.

It was not possible given the scope and scale of this study to explore the relationship between different drugs, possible sequential progression, or the extent to whether certain products lead to others (the 'gateway hypothesis'), which would require a different research design and the collection of a much larger, longitudinal data set. Rather than linear 'gateway' notions (where smoking 'careers' lead to or from traditional cigarettes), this study suggests instead a conceptualisation of an increasingly diverse smoking marketplace where some young people's relationship to smoking, tobacco and nicotine may not include traditional cigarettes or even 'smoking'. These new or emerging ENDS may establish themselves independently of traditional cigarettes and fulfil different social and cultural functions. Therefore, any consideration of normalisation processes taking place needs to be bounded by specific products and delivery systems, as well as by socio-demographic and cultural groups, supporting a notion of marketplace-differentiated normalisation. This is not to say that possible concerns regarding sequential 'progression' from e-cigarettes to cigarettes should not be a concern – particularly if e-cigarettes are a novelty resulting in young people developing a nicotine dependency and then being more likely to move on to other nicotine products as a result – but a broader picture is emerging such that public health professionals, researchers and policy makers will need to engage with this increasingly diverse context in relation to risk communication, regulation and harm reduction.

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Table 1: Self reported experience of various smoking and vaporising activities (as % of total answering relevant questions)

	<i>Never tried</i>	<i>Tried but didn't like</i>	<i>Tried & liked</i>	<i>Had in last year</i>	<i>Had in last month</i>	<i>Had in last week</i>	<i>Had today</i>	<i>Total n=</i>
<i>Cigarettes</i>	69 33.5%	46 22.3%	14 6.8%	13 6.3%	11 5.3%	6 2.9%	47 22.8%	206
<i>E-cigarettes</i>	88 44.4%	24 12.1%	27 13.6%	14 7.0%	17 8.6%	13 6.6%	15 7.6%	198
<i>Shisha</i>	99 48.5%	23 11.3%	32 15.7%	15 7.4%	13 6.4%	15 7.4%	7 3.4%	204
<i>Vaporisers</i>	167 84.3%	5 2.5%	8 4.0%	3 1.5%	2 1.0%	6 3.0%	7 3.5%	198
<i>Spice / 'legal highs'</i>	174 88.3%	12 6.1%	4 2.0%	1 0.5%	3 1.5%	2 1.0%	1 0.5%	197
<i>Paan</i>	177 87.6%	8 4.0%	5 2.5%	4 2.0%	2 1.0%	2 1.0%	4 2.0%	202

Table 2: Summary of normalisation indicators applied to cigarettes, e-cigarettes and shisha in UK

	Cigarettes / Tobacco	E-Cigarettes / Vape
Offer situations / availability range	<ul style="list-style-type: none"> • Sale prohibited to under 18s (proxy purchasing prohibited 1st Oct 2015). • Sale of flavoured cigarettes & roll-your own tobacco prohibited from 20th May 2016 (menthol cigs also banned, with 4 year phase-out period, (EU Tobacco Products Directive [TPD])). • Available online & at supermarkets, local grocery stores, off licenses, pubs & other shops. 	<ul style="list-style-type: none"> • Sale prohibited to under 18s from 1st Oct 2015 • Wide range of delivery systems & flavours/trengths of liquid available via increasing number of dedicated outlets, grocery stores, supermarkets, markets, pubs & online.
UK legal position	<ul style="list-style-type: none"> • Smoking prohibited in most indoor work places & enclosed public places. • Smoking prohibited in cars with children from Oct 2015. • From 2016: health warnings must cover 65% of packaging. • Proposed changes to standardised packaging for cigarette products (20th May 2016 but may be brought forward). 	<ul style="list-style-type: none"> • Not subject to indoor smoking legislation but selective bans applied by employers & owners of premises. • ASA guidelines for advertising until MHRA licensing & restrictions in 2016 • From 2016, health warnings, nicotine content & instructions must appear on product packaging. • From 2016, products containing more than 20 mg/ml prohibited unless licensed by MHRA.
Trying	<ul style="list-style-type: none"> • UK: HSCIC survey found 24% of secondary school children had ever smoked in 2014, compared with 22% in 2013 and 42% in 2003 (Ipsos MORI, 2015; Fuller & Hawkins, 2014). • Lancashire TSNW survey data found 41% of 14-17 year olds have tried cigarettes/smoking (32% of 14 year olds to 74% of 17 year olds) (Collins et al, 2013). • This study (Measham et al 2014) found 66.5% of college students had tried cigarettes. 	<ul style="list-style-type: none"> • UK: HSCIC survey found 18% of secondary school children had ever tried e-cigarettes (Ipsos MORI, 2015). • UK: ASH/YouGov survey found 'ever tried' amongst 11-18s aware of e-cigs was 8% in 2014 (13% for 16-18s). Of those who had never smoked cigarettes, 2% reported having tried e-cigs (ASH, 2014). • Survey of 740 13-18 year olds in Wales in 2014 found 15% had tried e-cigs & that this was often linked to cigarette smoking (Palmer & Hallingberg, 2014). • Lancashire TSNW survey found 27% of sample had bought or tried e-cigarettes (Collins et al, 2013). • This study (Measham et al 2014) found 55.6% had tried e-cigarettes.
Regular use	<ul style="list-style-type: none"> • UK: 18% prevalence of adult use (from 25% in 2007) (Smoking Toolkit Study, Jan 2015). • UK: HSCIC survey found 5% of secondary school children regularly smoked in 2014 and another 3% were occasional smokers (Ipsos MORI, 2015). 	<ul style="list-style-type: none"> • UK: HSCIC survey found 1% of secondary school children regularly used e-cigarettes in 2014 & another 2% were occasional users (Ipsos MORI, 2015). • UK: 2.1 million people in UK estimated to use e-cigs (ASH, 2014), predominantly former or

	<ul style="list-style-type: none"> Lancashire TSNW survey found 16% of 14-17 year olds reported currently smoking. This study (Measham et al 2014) found 22.8% of college students (predominantly 16-18 year olds) reported smoking cigarettes that day and a further 2.9% in the last week. 	<p>current smokers, with only 0.5% of never smokers having tried (Dockrell, et al, 2013).</p> <ul style="list-style-type: none"> Use by adult smokers has stabilised at c.17%, with c.14% current users (West & Brown, 2015). Palmer and Hallingberg's (2014) Welsh survey found that 7% of 13-18s current used e-cigs (prevalence increasing with age). This study (Measham et al 2014) found 7.6% of college students had used e-cigarettes that day with a further 6.6% in the last week.
Future intentions	<ul style="list-style-type: none"> 	<ul style="list-style-type: none"> Only 1% of those who had never tried e-cigarettes thought they would try e-cigarettes soon (ASH, 2014).
Risk perception (this study, Measham et al 2014)	<ul style="list-style-type: none"> Perceived harms & risks around cigarettes remain high amongst smokers & non-smokers. Mean harm score in this study 8.4. 	<ul style="list-style-type: none"> Risk / harm perception varied, often due to view of insufficient evidence & concerns about product quality. Mean harm score in this study 5.4. Precautionary principle, harm reduction (vis a vis smoking) & positive risk positions apparent in responses.
Self perceived knowledge	<ul style="list-style-type: none"> Knowledge high – general evidence of risk communication messages. Smokers tend to be aware of risks/harms. 	<ul style="list-style-type: none"> This study (Measham et al 2014) suggests awareness high amongst most college students, however, conflicting or absent evidence/communication leads to uncertainty: "waiting to see – when people find out how really bad they are".
Cultural accommodation	<ul style="list-style-type: none"> Increasingly negative views of smoking & smokers, health & social impacts. 	<ul style="list-style-type: none"> Some tolerance of e-cigarette use, with both users & some non-users supporting others' use & speaking positively of attractiveness of flavours, tricks etc. Some evidence of e-cigarettes seen as 'cool'/socially positive, particularly for younger people.

Notes

Trying and usage, as well as being a challenge in relation to young people's behaviour (what is current / frequent use for young people who have varying usage patterns?), appears methodologically muddled at present. Studies do not always use the same measure of regular or current use for e-cigarettes and the comparisons between regular smoking and regular (often once a week or more) e-cigarette use do not always correspond. Agreement about methodological standards in this area would assist comparisons further. Also, some studies break down e-cigarette use by current smoking, but not always by whether young people have previously been smokers, so some data presents as non-smokers when respondents may have been former smokers who have quit (possible using e-cigarettes).

Chart 1: Cigarette Harm Perception - 2014 College Study

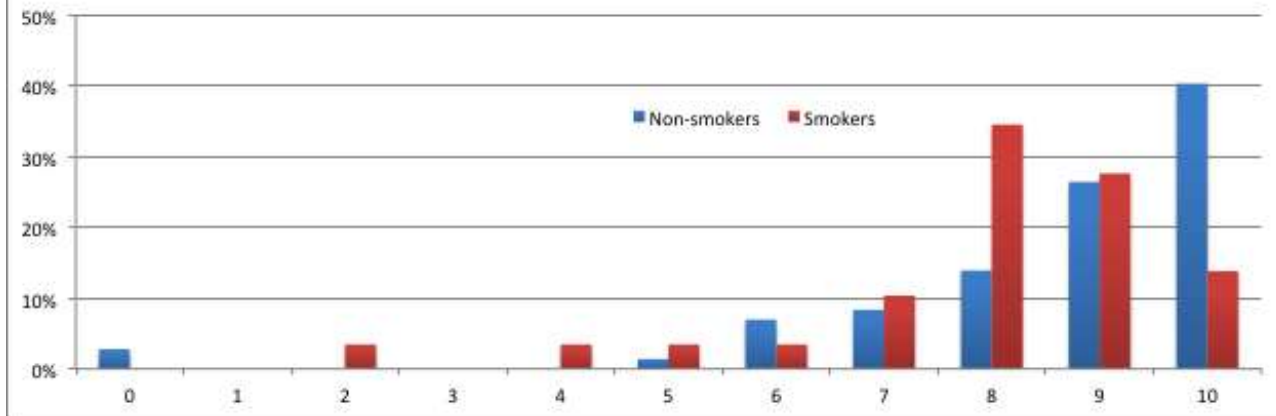


Chart 2: E-Cigarette Harm Perception - 2014 College Study

